

An Essay on
Water
as an Adjuvant in Medicine

Respectfully submitted

to the
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of

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By

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In writing upon a subject so universal as Water one can bring into action many experiments generally, but an essay on Water as to its uses in Medicine the subject is somewhat narrowed; but still, for one who is accustomed to writing, and has words and thoughts innumerable, at command, and especially one well read in Medicine, it would not be a very difficult task.

But as I do not claim to be too well read in the science, it cannot be expected that I should write as profoundly on the subject as an older and more experienced person.

What I propose to do however, is to record experiments made on

myself, with different forms and kinds of bath, and I shall also bring to my aid such references and confirmations as well as contradictions^{and}.

I shall bring forward cases from my own experience and the experience of others.

I hope I may be able to show the manner and circumstances wherein Water may be used in accordance with the law Similia,

1st. Then, as to the article

The physical properties of Water are well known. It is transparent, colorless, inodorous, and tasteless; slightly compressible by a very strong pressure; elastic; converted into vapor by heat; boils at 212°F ; congeals at 32°F .

It is the standard of weight, with which all solid and liquid bodies are compared; its specific gravity is therefore 1.

Water has the power of absorbing a great number of gaseous bodies.

It always contains air. It is one of the most powerful solvents in nature. It enters into combination with various bodies.

The affinity of water for some substances is so strong that it cannot be entirely separated from them without at the same time decomposing the substance.

It enters into the composition of almost every substance. In animal and vegetable bodies, it gives the necessary

fluidity of the blood of the former and the sap of the latter, without which neither could flow and be distributed throughout and nourish the different bodies.

The blood contains $\frac{4}{5}$ ths of its weight in water. As a proof of the large proportion of water entering into the composition of the human body I may mention a fact stated by Blumenbach viz. that a perfectly dry mummy of an adult Guanche (one of the original inhabitants of Teneriffe) with all the muscles and viscera or internal organs entire, did not exceed seven and a half pounds in weight.

Bone itself and cartilage contain still greater proportion of water than blood, as a necessary constituent part

An illustration of the great proportion of water entering into the form and weight of the human body, is seen in the sunken shrivelled, diminished form of a stout man who has died after a few hours illness with Asiatic Cholera, there having been copious evacuations of mucus.

Water was looked upon formerly as one of the elements, of which it was thought there were four, Earth, air, Fire, and Water.

Modern Chemistry however has demonstrated the fact that each of them are compound not simple elements, as for instance water is H. O. —

2^d. Its history in connection with
the healing ark &c -

We find recorded in Genesis 1st 2 ver.
" And the earth was without form and
void, and darkness was on the face
of the deep, and the spirit of God
moved upon the face of the waters.

We find the water was created
before the earth had form, and we
can see the wisdom of the Almighty
in forming the waters, and as a
matter of course it was not made
without purpose, and among other
great uses it is claimed and claims
its place as a medicinal agent, or
at least as a valuable adjurant.

It has been used in all ages as a
common household article, and is

indispensable to Health.

The uses of water are various viz. Bathing, household purposes, as an adjutant to Medicine and in the olden time was used by the Greeks & Romans in their religious ordinances &c. We have in Ancient history accounts of the baths, and it appears that great attention was paid to them. Bathing may with propriety be regarded as a practice both congenial to our feelings of bodily comfort as well as conducive to vigorous health. As to its antiquity we cannot doubt, as it is resorted to in every stage of society from the wandering savage, to the inhabitants of large and refined cities. In the best description of ancient manners

we meet with accounts of bathing in rivers. Domestic baths are also of remote antiquity, as the poet tells of Andromache preparing warm baths for Hector on his return from battle; and of Penelope calling in their aid to mitigate her melancholy at the prolonged absence of her husband. Minerva is figured to have imparted renewed vigor to the wearied limbs of Hercules at the warm springs of Thermopylae.

Homer gives frequent accounts describing the customs of females attending the male guests and assisting them in their ablutions.

We could give accounts from Saen & History of the importance attached to bathing as a means of cure of loathsome disease, as can be illustrated by the order

of Elisha to Naaman the leper to wash seven times in the river Jordan, and in John, where is the account of our Saviour commanding the blind man to wash in the pool of Siloam.

The pool of Bethesda was also resorted to by the sick and infirm but as to the medicinal qualities of the water we know nothing. And if they had not had faith a cure would not have been wrought.

As typical of moral purity, bathing by frequent ablutions, and immersion, was made to form part of the religious rites of the inhabitants of Central Asia and the East.

The Greeks were doubtless familiar with bathing, but were indebted to the Egyptians for giving system to bathing as

part of the medical art. Bathing sometimes called sacred by the ancients

Bathing was regarded as a luxury as well as an observance of hygiene in ancient Egypt, as seems to be proved by the circumstances of its being prohibited during time of general mourning. Boerhaave, who was a distinguished practitioner, teacher, writer utters several sentences in praise of the diuretic value of water, among them we read the following, —

1^o That pure and light waters are agreeable to the different natures and constitutions of all men.

2^o That our remedy can more effectually secure health and prevent disease than pure water, That drinking of water

is serviceable in every complexion.
Hoffmann calls it an "universal remedy"
and "we assert" he says, "That water is a
remedy suited to all persons at all
times; that there is no better preservation
from distempers; that it is assurly
serviceable in acute and chronic
diseases; and lastly, that its use
answers to all indications, both of
preservation and cure. -

Hippocrates, gives some precise
indications to those who are suffer-
ing from disease -

"To persons whose bellies are hard
and easily, burnt up; by which we
may understand the bilious hum-
erament and costive habit, the
sweetest and lightest, and the most

limped will be proper, but those whose bellies are soft, loose, and putridous, lymphatic temperament, with tendency to looseness of the bowels," should chose the hardest water &c -

Much more might doubtless be written under this head, but the above is sufficient for this paper -

3^d. Its Physiological effects -

For the sake of clearness we shall divide it into three parts or agents -

- A - The cold bath, from freezing to 60°
- B - The tepid bath from 60° to 90°
- C - The hot bath from 100° upward

A - Effects of cold bath -

Chill, shivering, pale shuddering
skin, collapse in the cutaneous and

superficial vessels; Slowness of circulation, generall depression of all functional action connected with the skin, and excretory system.

Sense of suffocation and constriction in the epigastrium, congeard skin, labored breathing; difficult speech, loss of voice; depression of circulation, blueness of the skin; pain and cramps in muscles, numbness; Hippocratic countenance, sunken eyes &c; Determination of blood to internal organs —

Uses (Old School) Galen, not in cold thin persons &c, Hippocrates, Inflammations, Hemorrhages, convulsions affecting, with vascular excitement, Fervor &c &c —

Hydropathic uses; The Hydropathist

use cold water in pretty much the same diseases as are mentioned under old school, i.e. Fevers, inflammations, hemorrhage, etc.

Homœopathic uses—

1st General chilleiness; chills; colds; chills preceding an attack of fever &

2^d Habitual coldness; slowness or depression of circulation; stiffened joints; Paralysis (sentient or insentient)

3rd Suppressed perspiration from cold
coolness of surface—

4th Suppression of excretions;

Menstrual flow (sites or comp.)

Urine " "

Faeces — Enrichin; Douche bath

5th Torpidity of the functions of various organs —

- Head - tendency of blood, sitz or foot bath
Chest sitz "
Sitz " "
Head and toothache foot bath
6th Mechanical injuries (200 years ago)
Bruises &c cold water immediately
after the injury
7th Frost bite —
8th Cholera (hot drinks cold application)
9th Intermittent fever (during the chill
a shower bath very cold)
10th Disease of the skin
11th Impotency (cooled sitz)
- o —

B - Effects of hot, warm or tepid bath
from 60° and upwards, —

Increase in frequency and force
of the circulation or pulse.

Redness and heat of the skin or surface,
fullness of superficial vessels; respiration
buried; Mind obtuse and inattentive,
Vertigo, excessive perspiration; Confus-
ion of thoughts; dimness of sight; pain
in head; Urging to urinate -

"Dr Sockette in his experiment remarks
My sensations were precisely such as
they are in a violent case of fever.

Caution, Persons, sanguinous, pleth-
oric, full large head, should use the
hot or warm bath with great caution.

Uses (Old school) —

Persons of cold still bodies; To quiet
nerves; Convulsions; Hysterical affections;
Colic; Insanity; Bilious Colic; Cholera
Morbus; Cholera infantum; Cramp; In-
fluenza; Bronchitis; Asthma, difla-

- mation of liver &c &c -

Intermittent fever during the chill,
Congestive fever; Cholera cramps,-

Affections of the skin &c -

Caution, Debilitated persons should
avoid warm baths, except some febrile
excitement remain.

Hydropathic Uses -

About the same as mentioned under
old school, as they go pretty much by
contraries -

Homeopathic Uses -

1st Synochal fever; any fever character-
ized by great heat of surface, rapid pulse.

2^d Great vascular excitement &c.

3^r Apoplexy; dizziness, headache,
heat in head -

4th Delirium, insanity (with febrile symptoms)

5th Intermittent fever (hot stage)

6th Inflammatory affections -

Burns, Injuries (Inflammatory stage)

Whitlow or Felon; Inflamed swelling,
Inflammatory Rheumatism

Inflammation of eyes, and of ear -

Eruptive fever, Measles, Scarletina &c)

General Rules -

In affections with excited action,
vascular or nervous, use always a bath
higher than the temperature of the body.

Contra

In depressed vascular or nervous
action, use a bath lower than the tem-
perature of the body immersed in it,-

I have given the three degrees of
bath and the three different schools put
them to as a curative agent -

"The first and sole duty of the physician is, to restore health to the sick; this is the true art of healing: The perfection of a cure consists in restoring health in a prompt, mild, and permanent manner; in removing and annihilating disease by the shortest, safest, and most certain means, upon principles that are at once plain and intelligible," (Organon)

If we know not the character of drugs we cannot apply them rationally to the cure of disease; and if we wish "to restore health to the sick, in a prompt mild, and permanent manner" we must understand the remedies we would use; and we are taught by no less an example than Hahnemann's himself, to prove the drugs on our own persons; This has been

done until we have volumes of *Natura Medica*; but Water has not been found, Why should we not have a proving of it? It is an invaluable agent, a system of cure has been established, which has for its only remedy (what ever may be the case) Water.

More attention should be paid to this article by physicians, experiments should be made, I shall now give what few experiments I have made with the rules by which I was guided-

The following are the rules I followed in my experiments -

- 1st. Note the Temperature of the room -
- 2^d The number of pulsations per minute
- 3^d The number of respirations per minute
- 4th The Temperature @ in mouth; &

in axilla; C in popliteal space; d at plantar surface of foot —
2 —

Immerse the entire body except
the face in water.

1st Note the temperature of the water

2^d At the end of two minutes note

@ the pulse; & the respirations

② the temperature of mouth —

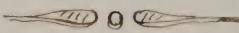
3^r At the end of five minutes, leave
the water, and note the points @; &

② and d, in section first, together
with the sensations and so forth, exper-
ienced during the bath —

4th After being out of the water five
or ten minutes, make same observa-
tions again 3^d —

During the day or two succeeding
note symptoms both subjective and

objective, as in the perceiving of any other substance.



For a considerable time I have experienced, a dull heavy sensation in forehead, feels as if I could pull an envelope from off my brain. Sometimes had quite severe headache. The pain in forehead sometimes shot back and at times is quite sharp at sinciput.

For a few days have had a bearing down pressing sensation at anus. Constipation at times, at present feel much relieved. Had hemorrhoids two years ago.

Health generally good, Had an ulcer on middle third right leg in the Spring of 1857 healed during the summer, but left a copper colored spot about the

size of a silver dollar, I feel at times a very sharp pain dart thru. the place.

Occasionally pimplies appear on my face and forehead, and have had them for a long time on my shoulders, also some on legs.

May 12/57. Have been very unwell, feeling of enlargement in Hypochondrium, dull pain; a sharp shooting pain up to shoulders. Seven frontal headache so the evening was much better, feeling of soreness in Hypogastrum



The first experiment I made, would be classed under the head of cold bath

Temperature of room 82° Fah: and of the water 63° Fah: —

I remained in the bath about two minutes

immediately on immersion, my breathing became hurried and quite loud & labored, as if a tight bandage were around my chest. A chilliness crept over me from my feet to the top of my head.

I had suffered for a day or two with a frontal headache, which had been relieved by Bellad. and while in the bath it returned very severely, my head felt heavy and full. The water created the sensation of coldness. I had intended remaining in the bath for the period of five minutes, and I was under the impression that I had done so (I had only been in two min.)

Upon quitting the bath, my head felt very heavy. I could scarcely control myself, I staggered so, that I should have fallen to the floor, if I had not sat down

on a chair which was near; diminished temperature and paleness of the skin, effacement of the superficial veins, stoppage of the functions in part or wholly dependent on the capillary system.

About an hour and a half after the bath a feeling of weakness in both knees, finger nails purple, Pulse 85, Vertigo -

A succession of chills from coccyx up back, after the bath a pleasant glow over body -

Pulse, before entering the bath was beating at the rate of 64 a minute and full, after I had gotten out of the bath it had increased nine beats a minute making 73 a minute -

Respiration, before entering was 16 in minute and upon quitting the bath it had increased

four & minute, making twenty respirations
a minute, being quite hurried.

c, Temperature of mouth before immersion
 92° Fah. after leaving the bath 90° , a decrease
of two degrees.— d, Temperature of axilla
before immersion, 95° Fah., after leaving
the bath 90° Fah., a decrease of 5° —

e, Temperature of popliteal space before
immersion 95° after leaving the bath
 90° , a decrease of 5° —

f, Temperature of plantar surface of
foot before immersion 80° Fah. after leaving
the bath 83° , an increase of 3° —

The second trial was but a short
one, as I had not time to go into it as
thoroughly, as I should have wished.

Temperature of room 82° Fah.—Water 70° Fah.
Number of pulsations at wrist a minute 76.

after getting out of bath 61, two minutes
after 66, an hour and a half after 85,
and full

Number of respirations a minute 20, during
the bath 23, after bath a few minutes 22,

Temperature of axilla before the bath

93° Fah after $90\frac{1}{2}^{\circ}$ —

Temperature of mouth before the bath

91° after 90° —

Temperature popliteal space before bath

91° , after bath 90° —

Temperature plantar surface of foot
before bath 91° , after bath 89° —

Chills all over my body; oppression at
the chest; continual and quite violent
shivering. Oppression in forehead,

Pulse 74 and small; veins collapsed;

Skin pale.

From the reasons presented it will be seen that water might be made a much more useful article to the physician than it is.

Physicians cannot be too careful in prescribing cold baths. I know of a case, and I have no doubt that they can be multiplied, A young lady about 18 years of age at the time, of a very nervous temperament, who was much prostrated, delirious and dangerously ill from the effects of a cold bath prescribed by a Homeopathic physician. Instead of the cold bath above prescribed, she should have been directed to take a sponge bath, every morning in moderately cool water, until her nervous system would become accustomed

to cold water. In intermittent fever,
water as an auxiliary to Homoeopathic
practice is generally acknowledged to
be very useful. In such cases the shower
bath is used, Dr. Howe of Miss. reports
cases, he says, the cold shower bath
should only be used, at the commence-
ment of a chill, and only in those
patients, who have sufficient vitality in
their system for a ready reaction, after
its application, the patient must be
well rubbed after the bath, his pulse must
be carefully watched, and should it
be found failing a dose of Imit. Camph.
should be administered.—

But I must close this Essay, hoping
that someone will do the just off the eas-
tject which I have failed

Dines